

09/853,137

10194.8017.US01/CINGP113USA

REMARKS

Claims 1, 2, 4-15 and 18-20 are currently pending in the subject application and are presently under consideration. Claim 4-7 have been amended as shown in the listing of claims at pages 2-5.

Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

**I. Rejection of Claims 15 and 18-20 Under 35 U.S.C. §102(e)**

Claims 15 and 18-20 stand rejected under 35 U.S.C. §102(e) as being anticipated by Galipeau *et al.* (U.S. Pat. No. 6,249,913 B1). It is respectfully requested that this rejection should be withdrawn for at least the following reasons. Galipeau *et al.* does not teach or suggest each and every element as set forth in the subject claims.

A single prior art reference anticipates a patent claim only if it expressly or inherently describes each and every limitation set forth in the patent claim. *Trintec Industries, Inc. v. Top-U.S.A. Corp.*, 295 F.3d 1292, 63 USPQ2d 1597 (Fed. Cir. 2002); *See Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the ... claim. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Applicant's claimed invention relates to an integrated communication system for distributing integrated, and combined or reformatted audio/video and other signals over aircraft telecommunications wiring. More particularly, independent claim 15 recites a communications system for an aircraft, comprising, *an integrated signal unit that communicates a plurality of disparate signals of an aircraft bus to and from a passenger seat, which signal unit interfaces to the aircraft bus via existing telecommunication lines, wherein the signal unit reformats at least one of audio signals and video signals into reformatted information, and transmits the reformatted information over the existing telecommunications lines to the passenger seat; and a receiving system interfaced to the passenger seat and in communication with the signal unit that receives at least one of the plurality of disparate signals and outputs a signal to a passenger in the passenger seat.*

09/853,137

10194.8017.US01/CINGP113USA

Galipeau *et al.* does not expressly or inherently disclose the aforementioned novel aspects of applicant's invention as recited in the subject claims.

Galipeau *et al.* discloses an aircraft data management system that provides a passenger seated on the aircraft with a number of entertainment and productivity enhancing options. Such options include video, audio, internet, airplane systems data and power. Located proximate to each seat group is an integrated seat box that includes a network interface card that identifies a requesting passenger for proper directing of the required data and/or power from devices that interface with a network controller back to the requesting passenger. Accordingly, a seat-to-seat cable is disclosed that delivers both power and data to integrated seat boxes from a plurality of data sources and at least one power source. The seat-to-seat cable contains both data communication lines and power supply lines and transmits data and power from data sources and power sources to selected identifiable seats by way of the network controller. (See Col. 4, lines 21-31).

In contrast, applicant's claimed invention utilizes communication links interfaced to an aircraft bus which forwards the various signals from their respective signal generating devices at other places in the aircraft to the integrated signal unit. An integrated signal unit then reformats and integrates all of the signals and forwards them on through a set of wireline or wireless links to the various physical apparatus or devices in the seat. For example, a telephone receiver, an audio/video monitor, or a radio or music speaker may be interfaced in a passenger seat. Thus, the present invention utilizes an integrated signal unit that combines together data (reformatted audio/video/other signals) and other information and sends this reformatted information over telecommunication-type wiring, eliminating the need for separate audio and telecommunications wiring.

Galipeau *et al.* directs data and/or power from devices that interface with a network controller back to the requesting passenger but does not reformat audio (or other data) and pass it as telecommunications data on unused channels or existing telecommunication wiring such that separate audio and telecommunications wiring is not necessary. Accordingly, Galipeau *et al.* is silent regarding an integrated communication system for an aircraft, wherein *an integrated signal unit reformats the plurality of*

09/853,137

10194.8017.US01/CINGP113USA

*signals into reformatted information, and transmits the reformatted information to the passenger seat.*

In view of at least the above, it is readily apparent that Galipeau *et al.* fails to expressly or inherently disclose applicant's claimed invention as recited in independent claim 15 (and claims 18-20 which respectively depend there from). Accordingly, it is respectfully requested that these claims be deemed allowable.

II. **Rejection of Claims 1, 2 and 4-14 Under 35 U.S.C. §103(a)**

Claims 1, 2 and 4-14 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Galipeau *et al.* in view of Garney *et al.* (US Pat. No. 5,890,015). It is respectfully requested that this rejection be withdrawn for at least the following reasons. Galipeau *et al.* and Garney *et al.*, individually or in combination, do not teach or suggest each and every element as set forth in the subject claims.

To reject claims in an application under §103, an examiner must show an unrebutted *prima facie* case of obviousness. A *prima facie* case of obviousness is established by a showing of three basic criteria. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. See MPEP §706.02(j). The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. See *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Applicant's claimed invention relates to an integrated communication system for distributing integrated, and combined or reformatted audio/video and other signals over aircraft telecommunications wiring. More particularly, independent claims 1 and 8 recite an integrated communication system for an aircraft having at least one passenger seat, comprising *an integrated signal unit operable to receive and transmit a plurality of signals of disparate nature to and from a user of the at least one passenger seat in the*

09/853,137

10194.8017.US01/CINGP113USA

*aircraft, the integrated signal unit reformats the plurality of signals into reformatted information, and transmits the reformatted information to the passenger seat, ...; a plurality of aircraft communication links interfaced with the integrated signal unit for carrying the reformatted information throughout the aircraft from sources of the reformatted information...; and a receiving device interfaced to the at least one passenger seat....* Galipeau *et al.* does not expressly or inherently disclose the aforementioned novel aspects of applicant's invention as recited in the subject claims.

As stated *supra*, Galipeau *et al.* teaches an aircraft data management system that provides a passenger seated on the aircraft with a number of entertainment and productivity enhancing options. Such options include video, audio, internet, airplane systems data and power. Located proximate to each seat group is an integrated seat box that includes a network interface card that identifies a requesting passenger for proper directing of the required data and/or power from devices that interface with a network controller back to the requesting passenger. Accordingly, a seat-to-seat cable is disclosed that delivers both power and data to integrated seat boxes from a plurality of data sources and at least one power source. The seat-to-seat cable contains both data communication lines and power supply lines and transmits data and power from data sources and power sources to selected identifiable seats by way of the network controller. (See Col. 4, lines 21-31).

Garney *et al.* does not make up for the aforementioned deficiencies of Galipeau *et al.* with respect to independent claim 1 (which claims 2 and 4-7 depend there from). Garney *et al.* relates to an apparatus and method for configuring a wireless module onto a Universal Serial Bus (USB) system for attaching USB devices. A hub is coupled to a first host controller. The first host controller interfaces with a second hub connected to a second host controller inside a USB host. The first host controller communicates with the host *via* a wireless communication system. (See col. 1, line 66-col. 2, line 18).

As stated above, teachings of references can be combined *only* if there is some suggestion or incentive to do so. Here, neither the nature of the problem to be solved, the teachings in the cited art, nor the knowledge of persons of ordinary skill provide sufficient suggestion or motivation to combine the references. Instead, the Examiner relies on improper hindsight in reaching his obviousness determination. Galipeau *et al.*

09/853,13710194.8017.US01/CINGP113USA

and Garney *et al.* cannot be combined to make the present invention obvious because there is not proper suggestion or motivation to combine the references' teachings to create the subject matter of independent claims 1 and 8.

Galipeau *et al.* presents an aircraft communication system using wired communication lines to transmit the data. Garney *et al.* presents a system to wirelessly transmit universal serial bus (USB) signals. However, Garney *et al.* makes no reference to using wireless transmissions in aircraft systems such as the present invention. Garney *et al.* merely references connecting USB devices, and aircraft media stations are not generally thought of as USB devices. Accordingly, there is no motivation to combine the references to achieve the desired aspects of the applicant's invention. Furthermore, a person of skill in the art would have difficulty applying Garney *et al.* to Galipeau *et al.* as aircrafts have stringent requirements for wireless communications and Garney *et al.* presents a generic system. Accordingly, neither Galipeau *et al.* nor Garney *et al.* provide any motivation to modify the aircraft data management system of Galipeau *et al.* as suggested in the present Office Action. Thus, the contention that the modification of the aircraft data management system to employ a USB "wireless link" would have been obvious in view of the teachings of Galipeau *et al.* and Garney *et al.* constitutes nothing more than hindsight speculation.

The combination of Galipeau *et al.* and Garney *et al.* does not teach the claimed invention. Specifically, if Garney *et al.* were applied to Galipeau *et al.*, the system would require multiple transmitters to achieve its goal of providing individualized content. The wireless transmitter (#421 on Figure 4) shown in Garney *et al.* communicates with only one transceiver (#422 on Figure 4). Therefore, Garney *et al.* only mentions communication between *two* devices. Consequently, an implementation of Garney *et al.* would require one wireless transmitter for every media station on the aircraft. Since each station or seat requires individualized content, individual transmissions are necessary. Therefore, each seat would need a dedicated transmitter to receive the individualized data. Whereas, applicant's claimed invention provides a single transmitting device capable of connecting many receivers, much like a cell phone tower broadcasting to cell phones. Only one tower is required for many phones. If Garney *et al.* were implemented with Galipeau *et al.*, multiple transmitters would be required to eliminate all cables.

09/853,13710194.8017.US01/CINGP113USA

Further, as shown in Figure 4, a subsequent hub (431) is required to route the signals to multiple devices. This would require cabling, and the present invention seeks to eliminate cables. Accordingly, Garney *et al.* does not make up for the aforementioned deficiencies of Galipeau *et al.* with regard to a wireless aircraft data management system.

With respect to independent claim 8, the seat unit of the aircraft communications system includes “*...a first audio processing circuit operable to generate audio signals, wherein the seat unit reformats the audio signals into reformatted audio information, and transmits the reformatted audio information to the passenger seat;...and a first telephone signal processing circuit operable to receive and send telephone signals, wherein the seat unit reformats the telephone signals into reformatted telephone information, and transmits the reformatted telephone information to the passenger seat...*

As stated *supra*, there is not proper suggestion or motivation to combine the references’ teachings to create the subject matter of independent claim 8. Furthermore, the combination of Galipeau *et al.* and Garney *et al.* does not teach the claimed invention. Specifically, if Garney *et al.* were applied to Galipeau *et al.*, the system would require multiple transmitters to achieve its goal of providing individualized content, as the wireless transmitter (#421 on Figure 4) shown in Garney *et al.* communicates with only one transceiver (#422 on Figure 4). Thus, Applicant’s representative respectfully requests that the rejection for this claim be withdrawn, and for claims 9-14 that depend there from.

In view of the aforementioned deficiencies of Galipeau *et al.* and Garney *et al.*, and because the requisite teaching or suggestion to combine the elements in the manner suggested is absent from the cited references, it is respectfully submitted that this rejection be withdrawn with respect to independent claims 1 and 8 (which claims 2, 4-7 and 9-14 depend respectively there from).

09/853,137

10194.8017.US01/CINGP113USA

CONCLUSION

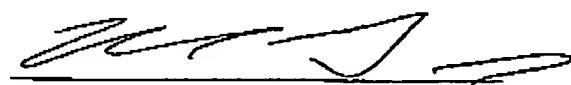
The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [CINGP113USA].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicant's undersigned representative at the telephone number below.

Respectfully submitted,

AMIN & TUROCY, LLP



Himanishu S. Amin  
Reg. No. 40,894

AMIN & TUROCY, LLP  
24<sup>TH</sup> Floor, National City Center  
1900 E. 9<sup>TH</sup> Street  
Cleveland, Ohio 44114  
Telephone (216) 696-8730  
Facsimile (216) 696-8731